

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF LOUISIANA
ALEXANDRIA DIVISION

JAMES WATSON

CIVIL ACTION NO. 04-1313-A

-vs-

JUDGE DRELL

SNAP-ON TOOLS, INC., ET AL.

MAGISTRATE JUDGE KIRK

R U L I N G

Before the Court is Defendant's Motion to Exclude the Testimony of Thomas C. Shelton, Ph.D., P.E. (Document No. 67). Plaintiff has filed his opposition, and oral argument was held on July 3, 2006. For the reasons that follow, Defendant's Motion to Exclude the Testimony of Thomas C. Shelton, Ph.D., P.E. is GRANTED IN PART AND DENIED IN PART. Specifically, Dr. Shelton may offer his opinions as to the behavior and state of the materials that composed the adaptor at issue and how the behavior and state of the materials affected the failure of the adaptor. Further, provided there is an evidentiary basis for his doing so through other testimony or documents, he may give an opinion on the condition of the adaptor at the time it left the manufacturer's control. However, he will not be allowed to testify as to any defect in the manufacturing process.

B A C K G R O U N D

On May 20, 2004, James Watson filed a Petition for Damages and instituted Civil Suit Number 16,574 on the docket of the 35th Judicial District Court, Grant Parish, Louisiana. Made defendants were Snap-on Tools Company, LLC (Snap-on

Tools) and Robert Browne. (Document No. 1.) The matter was removed to this Court on June 21, 2004 based on an assertion of diversity jurisdiction. By Judgment dated February 28, 2005, all claims against Robert Browne, a Louisiana resident, were dismissed, and Plaintiff's Motion to Remand was denied. (Document No. 24.) The Louisiana Workers' Compensation Corporation filed its Complaint of Intervention on November 4, 2004. (Document No. 20.)

In his Petition, Mr. Watson alleges that on May 23, 2003 he was employed by JKK Machine Shop in Alexandria, Louisiana. On that date, Plaintiff was securing component parts on an engine, and he was using a $\frac{3}{4}$ inch torque wrench that was equipped with a $\frac{3}{4}$ inch to $\frac{1}{2}$ inch socket adaptor manufactured by Snap-on Tools. Mr. Watson contends the adaptor broke during use, and that his resulting fall to the ground caused him to sustain personal injuries. There is no dispute that the product at issue is a Snap-on Model No. GLA62 $\frac{3}{4}$ inch to $\frac{1}{2}$ inch socket adaptor manufactured in 2001.

The applicable Louisiana law is the Louisiana Products Liability Act ("LPLA"), La. R.S. 9:2800.51, *et seq.*

As the Fifth Circuit Court of Appeals explained in Stahl v. Novartis Pharmaceuticals Corp., 283 F.3d 254, 260-61 (5th Cir. 2002):

To maintain a successful products liability action under the LPLA, a plaintiff must establish four elements: (1) that the defendant is a manufacturer of the product; (2) that the claimant's damage was proximately caused by a characteristic of the product; (3) that this characteristic made the product "unreasonably dangerous"; and

(4) that the claimant's damage arose from a reasonably anticipated use of the product by the claimant or someone else.

La. R.S. 9:2800.54(B) explains the four situations under which a product can be classified as "unreasonably dangerous." In this case Plaintiff claims the subject socket adaptor was unreasonably dangerous under only two of those circumstances:

- (1) La. R.S. 9:2800.54(B)(1), which provides a product is unreasonably dangerous if and only if the product is unreasonably dangerous in construction or composition as provided in R.S. 9:2800.55; and
- (2) La. R.S. 9:2800.54(B)(4), through which the product is unreasonably dangerous because it does not conform to an express warranty of the manufacturer about the product as provided in R.S. 9:2800.58.

Under La. R.S. 9:2800.55:

A product is unreasonably dangerous in construction or composition if, at the time the product left its manufacturer's control, the product deviated in a material way from the manufacturer's specifications or performance standards for the product or from otherwise identical products manufactured by the same manufacturer.

The parties have admitted in their Pretrial Stipulations (Document No. 64) that Defendant "does not have any manufacturing specifications for microscopic tears or laps which are created as a result of the embossing operation."

The parties also concur that the American National Standard addressing performance of the subject adaptor was ASME B107.10M-1996, which required the adaptor to withstand torque of 4,500 in. lb., an amount exceeding the torque

being applied by Mr. Watson at the time of the accident. (See Document No. 49, Exhibits “A” and “E,” and Document No. 53, Exhibit “A.”)

In a Ruling dated May 24, 2006, this Court denied Defendant’s motion for summary judgment, finding the reports and depositions of the experts created a genuine issue of material fact regarding whether the subject adaptor was “unreasonably dangerous” under Louisiana law at the time it left the manufacturer’s control. (Document No. 75.) The evidence submitted in conjunction with the Motion for Summary Judgment showed Plaintiff’s expert (Dr. Thomas C. Shelton, Ph.D., P.E.) traced the origin of the initial crack in the adaptor to the manufacturing process, while Defendant’s expert (Gene Olson, P.E.) opined the initial crack began when the adaptor was improperly used by the buyer.

Defendant now asks the Court to exclude any testimony from Dr. Shelton at the trial of this matter, which is set to begin on August 28, 2006. In support of the instant motion, Defendant argues Dr. Shelton conceded he has no expertise in the manufacture of adaptors and he was unfamiliar with the manufacturing process of the product at issue. While Snap-on Tools does not dispute that Dr. Shelton has expertise in the field of metallurgical engineering, Defendant contends Plaintiff’s expert is not qualified to express an opinion on the ultimate issue of whether the adaptor has a manufacturing defect. Defendant takes the position that the product characteristic Dr. Shelton has identified as a

manufacturing defect (microscopic laps or tears created during the embossing operation for the detent hole to keep the spring loaded ball in place) is a natural and expected result of the manufacturing process. Defendant argues Dr. Shelton's opinion that this characteristic constitutes a manufacturing defect is neither relevant nor helpful to the jury, because it is not based on any deviation from the manufacturer's specifications or performance standards as required by La. R.S. 9:2800.55. In addition, Defendant says Dr. Shelton's opinion is unreliable, because the conclusion that the laps or tears constitute a manufacturing defect is based upon the subjective opinion of Plaintiff's expert and not upon any objective criteria.

Defendant further contends Dr. Shelton has not tested his theory and the theory is not supported by any reliable methodology. Specifically, Snap-on Tools argues Dr. Shelton has not shown in any photograph or evidence that the origin of the fracture actually is the site of a microscopic tear; Dr. Shelton does not know the size of the tears or laps in the material at the point of the alleged fracture; and Dr. Shelton's theory is contradicted by testing performed by Defendant's expert.

Finally, Snap-on Tools says Dr. Shelton has no reliable basis to exclude misuse or abuse of the adaptor as the cause of the post-sale crack which led to the failure of the product.

In response, Plaintiff argues Dr. Shelton's testimony will assist the trier of fact in understanding the evidence presented by Defendant's experts and in

explaining, from a metallurgical engineering standpoint, how and why the accident occurred, because Dr. Shelton has specialized knowledge, skill, and education that are not in the possession of the jury. Plaintiff further contends Dr. Shelton's testimony is based on sufficient facts and data he learned from witnesses and his own inspection of the subject adaptor, and his testimony is the product of reliable principles and methods as outlined in publications generally utilized by metallurgists. Additionally, Plaintiff takes the position Dr. Shelton applied the principles and methods reliably to the facts of the case by: obtaining the subject adaptor; soliciting a narrative regarding how the accident occurred; inspecting, measuring, and photographing the adaptor; performing hardness testing; cleaning the adaptor; sectioning the adaptor; conducting scanning electronic microscopy examination and analysis and taking photographs of same; conducting a chemical analysis; determining the failure mechanism; and analyzing the fracture mechanics.

LAW AND ANALYSIS

Fed. R. Evid. 702 provides:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

Rule 702 gives the district court considerable discretion to admit or exclude expert testimony. See General Electric Co. v. Joiner, 522 U.S. 136, 138-39 (1997).

Under Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 592-93 (1993), trial courts are to act as “gatekeepers,” making a “preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue.” The gatekeeping function is meant to ensure that “any and all scientific testimony or evidence admitted is not only relevant, but [also] reliable.” Id. at 589.

The Advisory Committee Notes accompanying the 2000 amendments to Fed. R. Evid. 702 explain,

[T]he rejection of expert testimony is the exception rather than the rule. Daubert did not work a “seachange over federal evidence law,” and “the trial court’s role as gatekeeper is not intended to serve as a replacement for the adversary system.” United States v. 14.38 Acres of Land Situated in Leflore County, Mississippi, 80 F.3d 1074, 1078 (5th Cir. 1996). As the Court in Daubert stated: “Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.” 509 U.S. at 595.

The Reliability Issue

The party offering expert testimony is not obligated to prove the testimony is correct. Rather, the party bears the burden of establishing “by a preponderance of the evidence that the testimony is reliable.” Moore v. Ashland Chemical, Inc., 151 F.3d 269, 276 (5th Cir. 1998), *cert den.*, 526 U.S. 1064 (1999). In

analyzing reliability, the trial court must assess whether the reasoning or methodology supporting the expert's testimony is valid. The point is to exclude expert testimony that is based solely on subjective belief or unsupported speculation. See Daubert, 509 U.S. at 590. "Both the determination of reliability itself and the factors taken into account are left to the discretion of the district court consistent with its gatekeeping function under Fed. R. Evid. 702." Munoz v. Orr, 200 F.3d 291, 301 (5th Cir. 2000).

To that end, Daubert provides an illustrative (but not exhaustive) list of factors district courts may use to evaluate the reliability of expert testimony. These factors include whether the expert's theory or technique: (1) can be or has been tested; (2) has been subjected to peer review and publication; (3) has a known or potential rate of error or standards controlling its operation; and (4) is generally accepted in the relevant scientific community. Daubert, 509 U.S. at 593-94.

Subsequently, in Kumho Tire Co. v. Carmichael, 526 U.S. 137, 150 (1999), the Supreme Court emphasized that the Daubert analysis is a "flexible" one, and that "the factors identified in Daubert may or may not be pertinent in assessing reliability, depending on the nature of the issue, the expert's particular expertise, and the subject of his testimony." (Emphasis omitted.) The Kumho Tire Court further explained that the district court's responsibility is "to make certain that an expert, whether basing testimony upon professional studies or personal

experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.” Id. at 152. The Fifth Circuit has made it clear that “not every Daubert factor will be applicable in every situation; and a court has discretion to consider other factors it deems relevant.” Guy v. Crown Equipment Corp, 394 F.3d 320, 325 (5th Cir. 2004).

As Judge Vance noted in Kirkland v. Marriott International Inc., 416 F.Supp.2d 480, 484 (E.D. La. 2006), the Advisory Committee Note to Rule 702 of the Federal Rules of Evidence explains that testimony from an expert whose reliability is based mainly on that expert’s personal observations, professional experience, education, and training may be admissible. Specifically, that Committee Note provides:

Nothing in this amendment is intended to suggest that experience alone – or experience in conjunction with other knowledge, skill, training or education – may not provide sufficient foundation for expert testimony. To the contrary, the text of Rule 702 expressly contemplates that an expert may be qualified on the basis of experience.

Additionally, in Pipitone v. Biomatrix, 288 F.3d 239 (5th Cir. 2002), an expert’s testimony was found to be reliable even though he did not perform any experiments to test his conclusions. Rather, he simply reviewed the available literature, applied his knowledge to the situation, and ruled out other explanations because they were not probable under the facts of the plaintiff’s case. Likewise, in Martin v. Mobil Exploration and Producing, 224 F.3d 402 (5th Cir. 2002), an ecologist’s expert testimony was deemed reliable when it was

based upon his observations of a flooded marsh and his expertise in marshland ecology.

In the instant case, Dr. Shelton, a registered professional engineer in metallurgical engineering, testified he has an undergraduate degree in general engineering, a graduate-level degree in materials science and engineering, and a Ph.D. in mechanical engineering with a materials option. He has taught stress analysis, thermodynamics, strength of materials, material selection, and metallurgical laboratory courses at the university level, and he has given presentations regarding failure analysis. He is currently employed as president of Metallurgical & Materials Technologies, Inc., a company which performs failure analysis and testing of materials for insurance companies, industrial clients, and various governmental entities.

In scrutinizing the adaptor at issue, Dr. Shelton explained that he followed a standard failure analysis protocol found in 10 Metals Handbook, Failure Analysis and Prevention (Howard E. Boyer et al. eds., 8th ed.) (Exhibit "Shelton 1"). Specifically, Dr. Shelton performed a visual examination of the adaptor, including microscopic evaluation; he collected background information regarding the adaptor, its history, and the manner in which it failed; he performed metallographic and hardness testing; he inspected the adaptor for potential signs of abuse or misuse; and he rendered his opinion regarding the failure mechanism. Dr. Shelton further noted that his theory regarding the failure of the adaptor at

issue was discussed in 19 ASM Handbook, Fatigue and Fracture (Steven R. Lampman, et al. eds.) (Exhibit "Shelton 2").

Dr. Shelton testified he based his theory (that the pop-in crack originated at one of the microscopic laps or tears created during the deformation process to hold the detent ball in place) at least in part upon the appearance of the surface of the adaptor, cracks he observed on the other side of the socket that gave evidence of possible problems with the heat treatment of adaptor, the lack of evidence of other explanations for the failure (such as overload or impact), and testimony from Defendant's witnesses that no other adaptors had failed in this manner.

Additionally, Dr. Shelton stated he does not consider himself to be an expert in general manufacturing. Rather, he holds himself out as an expert in the analysis and evaluation of failures, and he has a sufficient understanding of manufacturing processes to be able to explain how those processes affect failure analysis. He further noted that he was retained in this case to evaluate the adaptor and determine what may have contributed to the failure.

In his argument regarding reliability, counsel for Defendant conceded that Dr. Shelton's qualifications were sufficient to allow him to testify about metallurgy and failure analysis.

Considering all these factors, the Court finds Dr. Shelton's testimony is based on specialized knowledge, training, experience, and firsthand observation,

and is supported by solid evidence in the scientific community. Therefore, it satisfies the reliability requirements of Fed. R. Evid. 702.

The Relevancy Issue

The Court must next determine whether Dr. Shelton's testimony is relevant under Daubert and Fed. R. Evid. 702. The "dispositive question" regarding relevance in this context,

[I]s whether the testimony will "assist the trier of fact to understand the evidence or to determine a fact in issue," Daubert, 509 U.S. at 591 (quoting Federal Rules of Evidence 702), not whether the testimony satisfies the plaintiff's burden on the ultimate issue at trial.

Ambrosini v. Labarraque, 101 F.3d 129, 135-36 (D. C. Cir. 1996). *See also* Rudd v. General Motors Corporation, 127 F.Supp.2d 1330 (M.D. Ala. 2001).

If the voluminous pretrial submissions of the parties are any indication, the evidence presented at trial will be replete with technical jargon and references beyond the knowledge of the average juror. This Court has no doubt Dr. Shelton's expertise in metallurgy and failure analysis will help the jury decipher the documents and photographs with which they will be confronted. His testimony in these areas, therefore, is certainly relevant.


As noted, above, however, Dr. Shelton is not, and does not claim to be, an expert in the manufacturing process involved in making the adaptor at issue. Accordingly, any testimony he might give that a "manufacturing defect" caused

the adaptor to fail would not provide scientific or technical assistance to the jury and will not be allowed.

CONCLUSION

Plaintiff has shown by a preponderance of the evidence that Dr. Shelton's testimony concerning issues of metallurgy and failure analysis is reliable and relevant under Fed. R. Evid. 702 and the applicable jurisprudence. However, Plaintiff has not established that Dr. Shelton can provide reliable or relevant testimony regarding any defects in the process used to manufacture the adaptor at issue. Therefore, Defendant's Motion to Exclude the Testimony of Thomas C. Shelton, Ph.D., P.E. (Document No. 67) is GRANTED IN PART AND DENIED IN PART. Specifically, Dr. Shelton may offer his opinions as to the behavior and state of the materials that composed the adaptor and how the behavior and state of the materials affected the failure of the adaptor. Further, provided there is an evidentiary basis for his doing so through other testimony or documents, he may give an opinion on the condition of the adaptor at the time it left the manufacturer's control. However, he will not be allowed to testify as to any defect in the manufacturing process.

SIGNED on this 25th day of July, 2006, at Alexandria, Louisiana.

A handwritten signature in black ink, appearing to read 'Dee D. Drell', is written over a horizontal line.

Dee D. Drell
United States District Judge